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ABSTRACT

This manual for school administrators and teachers is designed to aid in developing, planning, and conducting health occupations education programs at the secondary level. Guidelines for program organization and administration are offered regarding advisory committees, procedures for establishing programs, educational facilities, selection of clinical training agencies, transportation, teacher responsibilities and qualifications, students, and program evaluation. Also presented is a description of a program based on a general core curriculum designed to acquaint students with career opportunities, to prepare them for entry into the job market as a health assistant, and to foster interest in postsecondary education. The suggested program may be adapted to meet local needs in a 1-, 2-, or 3-year plan. General guidelines are offered for curriculum design, teaching methods, and suggested curriculum. Also suggested are core subjects, course outline, class and clinical experience, scheduling procedures, and evaluation of students. A sample lesson plan and lesson plan formats also appear. Appended material includes suggested reference books, equipment, teaching aids and audiovisuals, supplies, and supply sources. A schematic design for a health occupations education facility is also appended. (NJ)

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GUIDELINES FOR HEALTH OCCUPATIONS EDUCATION PROGRAMS IN SECONDARY SCHOOLS

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East Tennessee

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

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CE 007 754

TENNESSEE STATE BOARD FOR VOCATIONAL EDUCATION
Dr. Benjamin E. Carmichael, Executive Officer
Nashville 37219

PREFACE

This manual is to be used to aid school administrators and teachers in the development, planning, and conduction of Health Occupations Education programs at the secondary level.

The acute shortage of medical and para-medical workers indicates extensive educational needs.

The development of Health Occupations Education programs for the high school students is an attempt to alleviate shortages in the health field in Tennessee.

ACKNOWLEDGEMENT

This is to convey appreciation for the assistance from the staff at the Research Coordinating Unit, fellow co-workers, and others who contributed in any manner.

Further acknowledgement is given for the many ideas previously developed and published by various groups in the Division of Vocational-Technical Education as listed in the bibliography.

It is hoped that this manual will be of assistance to local school administrators and teachers in the implementation of Health Occupations Education programs at the secondary level.

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I. DEFINITION

TITLE AND CODE: HEALTH OCCUPATIONS EDUCATION--07.00 00

"Education for health occupations comprises the body of related subject matter, or the body of related courses, and planned experiences designed to impart knowledge and develop understandings and skills required to support the health professions."

"Education for health workers usually is conducted by recognized education agencies and appropriate health institutions and services that can make available the quality and kind of experiences needed by the trainee in developing competencies required for his occupational goal."

"Instruction is organized to prepare pupils for occupational objectives concerned with assisting qualified personnel in providing diagnostic, therapeutic, preventive, restorative, and rehabilitative services to people, including understandings and skills essential to provide care and health services to patients."[1]

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[1]U. S. Department of Health, Education, and Welfare, Office of Education, Vocational Education and Occupations (Washington, 1969), p. 39.

II. PHILOSOPHY

We believe that the changing nature of health occupations created by technological, political, and socioeconomic factors has increased the need for trained health workers.

We believe that this need could be reduced if more students were interested in and informed about the opportunities available in the health service fields.

We believe that upon completion of this program students could have sufficient basic knowledge and skills to enter the world of work at a health assistant level.

We believe that such a curriculum could also motivate qualified students to continue education at the postsecondary level in a health occupation program.

III. OBJECTIVES

A. General Objectives

1. To assist students to acquire knowledge of the career opportunities available in the health field so that upon completion of the program they will be able to make a more realistic occupational choice.

2. To assist students to acquire knowledge, skills, and attitudes from a core curriculum and varied occupational experiences which will prepare them from employment at the assistant level in a health occupation of their choice as demonstrated by performance, interest, and class achievement.

3. To assist students to become interested in pursuing advanced training in a health occupation at the postsecondary level by the utilization of resource health personnel speakers and related observational field trips.

4. To assist students to acquire knowledge of and apply good health and good citizenship practices in their daily living by providing them with an appropriate educational program.

B. Specific Objectives

To enable students to:

1. Acquire knowledge of local health facilities and career opportunities available in the health field.

2. Acquire knowledge and develop skills necessary for a health worker at the assistant level.

3. Develop the ability to work cooperatively with others.

4. Develop safe work habits.

5. Develop good habits of personal health.

6. Develop good ethical and moral practices.

IV. ORGANIZATION AND ADMINISTRATION

A. Advisory Committee

B. Procedures for Establishing Programs

C. Educational Facilities

D. Selection of Clinical Training Agencies

E. Transportation

F. Teacher Responsibilities and Qualifications

G. Students

H. Program Evaluation

IV. ORGANIZATION AND ADMINISTRATION

A. Local Advisory Committee

A health occupations education program can meet the needs of the student population it serves only if the teacher and school officials keep abreast of the rapidly changing needs of our complex society. The changing trends and practices found in the health field should be reflected in the curriculum and organization of the program. One of the best ways to provide an effective liaison between health occupations education programs and the health field is through the active use of an advisory committee. Extreme care should be exercised in establishing the committee, and its composition and purpose should be clearly defined.

Membership. The committee should be composed of five to seven members who are progressive, responsible, willing and able to devote the time and interest required to serve beneficially. Members who are to be appointed by a board representative (Superintendent or Vocational Director), should be composed of representatives from Education Medicine, Dentistry, Nursing, Hospital Administration, News Media, and the Lay Public. The teacher is a permanent member.

Purpose of the Committee. Even though its role has nothing to do with policy-making decisions (always an administrative responsibility), it can be of tremendous help in improving and maintaining health occupations education programs.

1. Make recommendations regarding curriculum content.
2. Aid in developing, maintaining, and upgrading the program operation.
3. Assist in program evaluation.
4. Assist in program promotion.

Meetings. It is suggested that the advisory committee meet as frequently as deemed necessary. An agenda should be prepared for each meeting to indicate the order of business and set the framework for discussion. Well planned and conducted meetings are conducive to good attendance.

The following are suggestions relative to preparing for and conducting a meeting of the advisory committee:

1. Meet at the most convenient time possible.
2. Inform members in writing of the time and place of the meeting. Notification of the meeting a week or two in advance and a reminder a few days in advance is usually a wise procedure.

3. Mail a copy of the agenda of the meeting to each member as a reminder.
4. Mail minutes of each meeting to the members.
5. Notify members of any results of their recommendations.
6. Meet and adjourn meetings on time.

Some of the functions for which the Chairman is responsible are:

1. Establishing meeting dates and calling the committee together.
2. Planning committee functions.
3. Preparing a suitable agenda.
4. Presiding at meetings.
5. Providing reports as needed.
6. Performing necessary follow-up.

Minutes of all meetings should be documented and a copy of the organizational meeting minutes be sent to the Regional Office.[2,3]

B. Procedures for Establishing Programs

Applications are developed by local education agencies and institutions in consultation with members of the State Board Staff assigned to Program Planning and Evaluation Section, Field Services Section and other consultants. Local applications are received, reviewed, processed and acted upon as follows:

1. The vocational-technical education programs, services and activities shall be planned in consultation with staff members of the Program Planning and Evaluation Section, the Field Services Section and other consultants.
2. Applications for approval and funding shall be submitted to the Program Planning and Evaluation Section for review in terms of employment opportunities and manpower needs, vocational education needs of the persons to be served, and the relative costs of the proposed programs, services and activities.
3. The Assistant Commissioner for Vocational-Technical Education transmits the applications which have been reviewed, and modified in consultation with appropriate agencies or institutions when necessary to the Executive Officer of the State Board with recommendations.

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[2]U. S. Department of Health, Education, and Welfare, Office of Education, Organization and Effective Use of Advisory Committees, (Washington, 1961).

[3]Guidelines and Course Outlines, Practical Nursing, (Nashville, 1973).

4. Copies of the approved applications are transmitted to appropriate governing board, division, section and institution.

C. Educational Facilities

Classroom space shall meet the requirements of the State Board of Education as set forth in the "Rules, Regulations, and Minimum Standards."

It is recommended that the classroom-demonstration area contain 2800 square feet.

Heating and air-conditioning should be thermostatically controlled. The lights should be fluorescent, without glare or reflection. The classroom should be in close proximity to rest rooms and library.

The facility should include:

Classroom Area. The classroom should be centrally located in order to permit observation of demonstrations. This area should include:

1. Tables and chairs.
2. Chalk board and bulletin board.
3. Teacher's desk and chair.
4. Filing Cabinet.
5. Book case for reference books.

Demonstration Area. This area should have two or three hospital beds each with a bedside table, overbed table, chair, and sink. Each complete unit shall be separated with draw curtains or portable screens.

There should also be counter work space, storage area, chemical sink, table, chairs and/or stools.

Storage Area. This area should be adequate in size to accommodate ample linens, supplies, visual aids, stretcher, wheelchair, and other teaching aids.

Dressing Rooms. These rooms should be provided for both male and female students which includes locker space, washbasins, and mirrors.

Instructor Office. This is desirable for the privacy needed for individual counseling with students. It should include a desk, chairs, book case, filing cabinet, and telephone (or easy access to one).

D Selection of Clinical Training Agencies

Prior to beginning the Health Occupations Education program, a survey should be made of the community to determine the types and numbers of clinical facilities available as training stations for the students. It will be necessary to know if these agencies will agree to cooperate in the conduction of the program. Agencies to survey include hospitals, nursing homes, doctors offices, dental and medical laboratories, and rehabilitation centers. Within the hospitals and/or nursing homes areas for experience should include: Nursing Service, Medical Records, Laboratory, X-ray, Physical Therapy, Inhalation Therapy, Pharmacy, Operating Room, Dietary, and Housekeeping.

The following points summarize the kind of training agencies desired:

1. List all the possible agencies in the community that could cooperate in the program.
2. The training agency should have the facilities for giving the training needed.
3. The training agency should be accessible.
4. The training agency staff should understand and endorse the program. They should be willing to accept the students as learners. There shall be an agreement between the school, the clinical agency, and parents or guardians prior to students beginning the clinical phase of training (Sample Agreement--next page).

Regardless of available resources, the essence of a sound educational program at the clinical level lies in the careful selection and planning of experiences that fulfill those pre-determined, carefully screened objectives specifically designed to meet the needs of the student in attaining his occupational objective.

E. Transportation

School transportation shall be provided for students to the clinical training agencies and for other learning experiences such as field trips. Provision for this should be made during the planning stage of the program.

F. Instructional Personnel

1. Teachers

a. Duties and Responsibilities

The instructor or instructors shall be responsible for the entire classroom instruction and coordinating the students' clinical

SAMPLE

STATE OF TENNESSEE
DEPARTMENT OF EDUCATION
DIVISION OF VOCATIONAL-TECHNICAL EDUCATION
HEALTH OCCUPATIONS EDUCATION
205 CORDELL HULL BUILDING
NASHVILLE, TENNESSEE 37219

CLINICAL TRAINING AGREEMENT

This Health Occupations Education high school program is designed to provide

_____ with clinical instruction and training
(Name)

in the occupation of _____.

_____
(City) (School) (Instructor)

The clinical agency is:

_____
(Name of Agency)

_____
(Address)

_____
(Telephone Number)

We, the undersigned, understand and agree to meet the requirements for the program as provided in the Occupational Procedures and Minimum Standards for Vocational Education in Tennessee.

Clinical Training Agency _____

Parent or Guardian _____

School or Principal _____

Student _____

Regional Supervisor _____

Date _____

experiences and related instruction. He/she shall be responsible for planning and organizing course content in a logical sequence. He/she must be able to teach the classroom and clinical materials so that meaningful experiences are made available to the students. The classroom and clinical materials must be taught so that the objectives of the course are met. The instructor must maintain good relations with the agencies offering clinical facilities in order to have effective instruction and to facilitate job placement. There should be a plan for follow-up studies on students completing the course to determine the effectiveness of the program. (See form "Follow-up" on next page)

b. Qualifications

They shall be high school graduates or the equivalent by the General Education Development Test. They must have two years of approved employment experience beyond the normal learning period in the occupation to be taught. The teacher shall be a master of the subject to be taught. Secondary school teachers must hold a valid Vocational Teachers' Certificate with endorsement in the subject area taught. It is felt that a registered nurse, preferably with a baccalaureate degree, should be employed if available.

c. Professional Improvement

The instructor must complete an approved sixteen clock hour preservice teacher education course before beginning work as a teacher or as soon thereafter as possible.

During the first five year period of employment, the instructor must complete at least twenty-seven quarter hours of approved professional teacher education or the equivalent in conference workshops.

A minimum of at least one such three quarter hour course must be completed each year.

2. Teacher Aides

Duties: The teacher aide shall be responsible to the teacher to which assigned and shall assist the teacher in the conduct of the instructional program. The aide performs such tasks as may be assigned and required to the extent qualified.

STATE OF TENNESSEE
DEPARTMENT OF EDUCATION
Division of Vocational-Technical Education
205 Cordell Hull Building
Nashville 37219

September 18, 1973

The evaluation of the Health Occupations Education Program will be enhanced by a follow-up of each student.

The follow-up can be used to improve the quality of a high school education program. The following sample form may be used by the instructor and/or counselor.

Please complete and return to _____

1. Employed

   Full time ☐ Part time ☐

2. Changed Positions Yes ☐ No ☐

   How many times _____

3. Present Employer: Name _____

   Address _____

4. Payroll Job Title

   _____

5. Pay raise

   After employment, I received a pay raise within

		Amount
☐	2 months	
☐	6 months	_____per hour
☐	12 months	_____per week
☐	Over 12 months	_____per month
		_____per year

6. Educational Program

I feel the program in high school has been helpful to my employment and/or advancement in my job.

☐ Yes ☐ No

7. I am continuing my education.

☐ Yes ☐ No

☐ In an Area School

☐ In a Community College

☐ In a College or University

☐ In other facility

8. I am seeking employment.

☐ Yes ☐ No

9. Other Comments: _____

_____

_____

Name

_____

Date

Qualifications: The same as for an occupational teacher except that only one year of appropriate employment experience will be required and they may serve as aides without holding a Vocational Teacher's Certificate. Generally, it is expected that teacher aides will be selected on the basis of their potential of becoming fully qualified teachers of vocational subjects.

G. Students

Requirements for Enrollment. Individuals will be admitted for enrollment in classes and be provided instruction for several types of health occupations on the basis of their potential for achieving competence in the health field by such instruction.

Since there is a variety of health careers to be introduced in the health occupations educational program, students with varying abilities could benefit from some phases of this program.

Due to the close contact with people and exposure to illnesses in the clinical agencies, it is necessary that the students be of good physical health. Prior to beginning their clinical experiences in a health agency, students shall have a physical examination by a licensed, practicing physician. They shall also have a tuberculin test if there is no school record of one within the past year.

Selection. It is suggested that students be allowed to enroll in the program during their sophomore, junior, and senior years. This would be determined by the type of program offered. (See General Design).

Students shall be selected based upon the following:

1. Interest shown and ability to profit by the instruction.
2. Be of good physical health.
3. Be recommended by guidance counselor based on vocational aptitude and achievement tests, and by personal interviews.
4. Be of employable age when entering the health agency for clinical experiences.
5. GATB Examination shall be administered before completion of the program.

There shall be at least fifteen and no more than twenty students in the class. Before a class of less than fifteen students may begin, permission must be obtained from the Assistant Commissioner of Vocational-Technical Education.

Due to the need for close supervision in the clinical area, it is desirable that the teacher-pupil ratio be one instructor for each ten students. In this area the utilization of a teacher aide would be of tremendous value.

H. Program Evaluation

The State Board shall provide for continuous and periodic evaluation of state and local programs, services, and activities.

V. DESCRIPTION OF THE PROGRAM

A. General Design

B. Curriculum Design

C. Teaching Methods

D. Suggested Curriculum

Core Subjects
Organization of Instruction
Course Outline and Sample Lesson Plan
Evaluation

V. DESCRIPTION OF THE PROGRAM

A. General Design

Since this program is designed to acquaint students with the career opportunities available in the health field, to foster in interest for pursuing education at the postsecondary level, and to be prepared as an entry level worker, a general core curriculum for a cluster of occupations should be offered.

The program of instruction is designed to meet the needs of students who are interested in or are preparing to enter one of the health occupation fields. This program may be adapted to meet local needs in a one, two, or three year plan. The first year of the program may begin in either the tenth or eleventh grade. If begun in the tenth grade, there would be adequate time prior to graduation for students to take subjects required for entry into health occupations educational program at the postsecondary level if a deficiency for such subjects existed.

During the first year of the program, an orientation and introduction to a broad category of health occupations including instruction, observational field trips, and laboratory experiences are to be offered. Either a one hour or a two hour block of time may be scheduled. It is suggested if the first year is begun in the tenth grade that one hour daily for a total of 180 hours be offered as a pre-vocational orientation, health occupations education class.

If the first year is begun in the eleventh grade as a two year program, it is recommended that two hours daily be given for a total of approximately 350 hours. Students are to be introduced to the requirements and responsibilities for entry into various health occupations, both medical and para-medical areas, such as: Nursing, Medicine, Dentistry, Radiology, Rehabilitation, Medical Laboratory, Medical Records, and others. Introductory units should be given in Vocational Relations, Bacteriology, First Aid, Anatomy and Physiology, Personal and Community Health, and Skills Basic to Nursing and Allied Fields. Field trips to the various health agencies and occupational guest speakers should be correlated with the core curriculum in order to foster meaningful learning experiences.

The second year of the program may consist of three hours daily for approximately 540 hours. These hours are to be utilized in both classroom activities and clinical experiences in a health agency. The students should be given the opportunity to gain experience in their desired field. It is recommended that each student receive occupational experiences in two or more areas. The work shall consist of advanced studies of areas begun in

the junior year as well as additional areas of study. These would include Introduction to Conditions of Illnesses, Basic Nutrition, Basic Principles Related to Pharmacology, Growth and Development, Rehabilitation, and Related Medical Terminology.

It is anticipated that some students may wish to discontinue the program after the eleventh grade in order to complete pre-entrance requirements for a chosen field. A third year of Health Occupations may be offered and be a Cooperative Study Program. Such a program would be especially beneficial for those students not planning to further their education at the postsecondary level. Speciality areas such as medical secretary, central supply aide, operating room technician, laundry manager, physical therapy aide, inhalation therapy aide, medical assistant, and pharmacy helper are among those occupations that could be considered in a co-op program.

One hundred and seventy-five class periods of not less than sixty minutes gross shall be the minimum requirement for granting one unit of credit. Two or three credits may be earned by devoting one or two additional periods of the same time length.

B. Curriculum Design

Curriculum design is central to the accomplishment of goals in health occupations education. To the extent that students with different occupational objectives receive core instruction, economy in teaching will be promoted, the students career choice will be broadened, and the functioning of the health team will be strengthened. The course outlined in this guide is intended to give the student the opportunity to develop understanding and knowledge together with sufficient skill to qualify him for employment at the health assistant level.

Since vocational education today must bridge the gap between man and work, the teacher should break traditional bonds of offering the tired and tested materials to using a broad spectrum of new ideas and approaches to interest students. Accomplishing all of this is possible if the teacher will agree to PLAN and ORGANIZE. To meet local needs, flexible use of suggestions and materials in this guide is advisable. To clarify the statement that flexibility is needed does not mean to by-pass the fundamental steps of planning, namely (1) analysis of the occupation and tasks, (2) course outlines, (3) instruction sheets, and (4) lesson plans. Rather, the flexibility comes from the extent of the in-depth development and use as indicated by the students, the training situation, and the needs of all personnel concerned.

SUGGESTED SCHEDULES

SCHEDULE I

Two-Year Program: HOE I 2 hour daily Time Block
HOE II 3 hour daily Time Block

HEALTH OCCUPATIONS I

FIRST SEMESTER (17 Weeks)	SECOND SEMESTER (18 Weeks)
9-12 General Education Classes	9-12 General Education Classes
1-3 Health Occupations Class	1-3 Health Occupations Class
10 Hrs. Wk. x 17 Wks. = 170 Hours	10 Hrs. Wk. x 18 Wks. = 180 Hours

Total: HOE I Class Hours = 350

HEALTH OCCUPATIONS II

FIRST SEMESTER (17 Weeks)	SECOND SEMESTER (18 Weeks)
9-12 Health Occupations Class	9-12 Health Occupations Class
Class:	Class:
2 day Wd.-6 Hr. Wk. x 17 Wks.:	1 day Wk.-3 Hr. Wd. x 18 Wks.:
102 Hrs.	54 Hrs.
Clinical:	Clinical:
3 day Wk.-9 Hr. Wk. x 17 Wks.:	4 day Wk.-12 Hr. Wk. x 18 Wks.:
153 Hrs.	216 Hrs.
255 Hrs.	270 Hrs.

Total: HOE II Class Hours = 156
Clinical Hours = 368
524 Hours

SCHEDULE II

Two-Year Program: HOE I 1 hour daily Time Block
HOE II 3 hour daily Time Block

HEALTH OCCUPATIONS I

Health Occupations Class One (1) Hour daily for Two (2) Semesters
5 Hrs. Wk. x 35 Weeks = 175 Hours

Total: HOE I Class Hours = 175

HEALTH OCCUPATIONS II

See Schedule I for HOE II Hours: 524

SCHEDULE I Two-Year Program--Total Hours: 874
SCHEDULE II Two-Year Program--Total Hours: 699

The organization of the course of instruction is the responsibility of the teacher. Course outlines developed by the teacher should meet the needs of the students in their community. Definite objectives for the courses should keep the teacher from becoming confused in the mass of instructional detail. Objectives are always written in terms of the learner. The answer to "WHAT SHOULD THE STUDENT DO NEXT?" can be answered by reference to the course of study which is based upon an analysis of the occupation and arrangement of tasks into their order of learning difficulty. Thus, the student may progress logically from the simple to the more complex in an orderly fashion. It is necessary for the teacher to allocate her time in order to give instruction and guidance in all areas. This will prevent dwelling too long in one area and being forced to neglect some other equally important area.

Included in this manual is a course outline which will serve as guides to the teacher in the development of course outlines in other subject areas. Course outlines can improve the instructor's teaching by providing a basis for the development of teaching techniques, teaching aids, and for evaluation of student progress.

In planning how to present the material contained in the course outlines, the teacher will find it necessary to break the material down into day-dy-day lessons. Lesson plans are valuable because they provide for smooth transition from previous lessons; insure sequential and adequate presentation of material; offer time control; provide thoughtful use of proper methods, aids, and equipment; establish a record of training accomplished; and serve as a guide for the teacher.

A lesson plan is an organized plan or procedure for teaching a complete lesson efficiently. Written lesson plans usually contain the following: (1) name or subject of the lesson or unit of training, (2) aim or purpose of the lesson, (3) references, (4) teaching aids, equipment, materials, and/or supplies, (5) methods of motivating student interest, (6) methods of presentation, (7) key points, (8) ways for students to apply the knowledge or skills developed, and (9) tests. (Sample Lesson Plan--next page).

The manipulative lesson plan is used to teach skills or operations listed in the course of study. It shows in considerable detail the organization of subject matter (operations/skills) necessary to teach the lesson. The content in the manipulative lesson plan is comprised of the steps and key points of the skill to be taught. The manipulative lesson is generally taught by the demonstration method. (See Page 30).

The related lesson plan is used to teach the related technology listed in the course of study. In related instruction a number of teaching methods may be used. (See Page 29).

SAMPLE

INSTRUCTOR'S LESSON PLAN

Name of Lesson: _____

Aim of Lesson: _____

_____

References: _____

_____

Instruments: _____

_____

Equipment: _____

_____

Supplies: _____

Materials: _____

_____

Instructional Aids: _____

Step 1. Introduction: (Prepare Learner's Mind)

_____

_____

_____

Step II. Presenting Lesson

Steps (List Points of Information)	Key Points (Things to Remember to Do or Say)
1. _____	1. _____
2. _____	2. _____
3. _____	3. _____

Step II. (continued)

Steps	Key Points
4. _____	4. _____
5. _____	5. _____
6. _____	6. _____
7. _____	7. _____
8. _____	8. _____
9. _____	9. _____
10. _____	10. _____
11. _____	11. _____
12. _____	12. _____

Step III. Application (Assignment)

_____

_____

_____

Step IV. Check-up or Test (How to find out if the learner knows the lesson)

_____

_____

_____

Summarization of Lesson: (Review the main points of the lesson and introduce the next lesson topic)

_____

_____

_____

SAMPLE

INSTRUCTOR'S LESSON PLAN
Manipulative Skills

Unit _____
Lesson _____

JOB (or operation):

AIM (or purpose):

TOOLS AND EQUIPMENT:

(Note: More space may be desired between headings.)

MATERIALS:

TEACHING AIDS:

REFERENCES:

I. PREPARATION (of the learner)

II. PRESENTATION (of the skills):

Operations or Steps	Key Points (things to remember to do or say)

II. PRESENTATION, continued

Operation or Steps	Key Points (things to remember to do or say)

III. APPLICATION (practice by learner under close supervision)

IV. TEST (performance of skill to acceptable standards)

Suggested Reading for Student:
The Next Lesson Is:

SAMPLE

INSTRUCTOR'S LESSON PLAN
Related Technical Information

Unit_____
Lesson_____

SUBJECT:

AIM (or purpose):

TEACHING AIDS:

MATERIALS:

REFERENCES:

I. PREPARATION (of the learner)

II. PRESENTATION (of the information)

Instructional Topics	Things to Remember to Do or Say

(Continued)

(Additional blank sheets can be ruled into two columns for notes for presentation step.)

II. PRESENTATION, continued

Instructional Topics	Things to Remember to Do or Say

III. APPLICATION (drills, illustrations, analogies, oral questions or assignments)

IV. TEST (final check on students' comprehension of material presented)

Suggested Reading for Student:

The Next Lesson Is:

The teacher must select the particular method which she feels is suitable and most effective for presenting the material contained in the lesson.[4,5,6]

C. Teaching Methods

The methods (s) selected should be suited to the objectives and course content. Provisions should be made by the teacher which will allow for maximum student participation in the learning process. The criteria for selection of method (s) should be:

appropriate to the objectives and desired behavioral changes
in accord with the psychological principles of learning
in accord with the capacity of the student
in accord with the availability of resources
in accord with the teacher's ability to use it effectively

Methods of teaching include:

1. The Lecture Method

This method will be used only for selected purposes such as:

a. To introduce a new subject or topic
b. To give direction for demonstration
c. To summarize larger phases of content
d. To supplement other teaching methods
e. To describe a personal experience

The lecture should illuminate, supplement, and reinforce the topic being studied. It should be presented from written notes, but should NOT be read. It should be prepared and presented in short units, preferably not more than 15 minutes in length.

The Lecture Method, carefully planned and skillfully presented, can allow for student participation through the mental activity of listening, thinking, reasoning and judging.

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[4]Tennessee State Board for Vocational Education, A Guide For Building A Course of Study, (Nashville, 1968).

[5]Tennessee State Board for Vocational Education, Shop Instructor's Handbook, (Nashville, 1964).

[6]Tennessee State Board for Vocational Education, Handbook For Instructors of Practical Nursing Education, (Nashville, 1967).

2. The Demonstration Method

This is the most important and the most frequently used method in the health occupations educational field. It is usually thought of as DEMONSTRATION-LECTURE. Demonstrations may be used:

a. To supplement lectures and discussions
b. To demonstrate procedures in the classroom and in the clinical agency
c. To give a clearer meaning to information previously studied
d. To demonstrate different approaches in establishing rapport with patients
e. To demonstrate the operation and use of equipment and materials
f. To demonstrate the manipulative skills involved in procedure performance

The Demonstration Method of teaching trains the student in the art of careful observation. It may be used for both group and individual instruction. The "why" of procedures are better clarified through the correlation of theory with practice. Return demonstrations allow for evaluation of student performance before clinical practice is permitted.

A well prepared lesson plan is essential for the teacher using this method.

3. The Discussion Method

This method of teaching disseminates information through questions and comments from the instructor combined with answers, comments and questions from the students. Discussion may be used in all types of lessons, but they are particularly useful to prepare students for the application of procedures to practical situations, to sum up and clarify material previously developed in the laboratory or classroom, and to introduce new information.

Other teaching methods include:

Role Playing	Supervised Clinical Experience
Clinical Conferences	Individualized Instruction
Patient-Care Studies	Group Discussion

Devices for use by teacher include:

1. Field Trips
2. Bulletin Boards
3. Posters, Charts

4. Chalk Board
5. Flannel Board
6. Projected Materials
   a. Transparencies
   b. Motion Pictures
   c. Slides
   d. Film Loops
   e. Film Strips
7. Electronic Devices
   a. Tape Recorder
   b. Educational Television
   c. Tele-Lecture
   d. Film Projectors
   e. Overhead Projector
8. Programmed Instruction
9. Real Objects and Models[7,8]

D. Suggested Curriculum

In order for the program to be more effective, the curriculum should be well planned. Presented as a guide in this manual are suggested core subjects, course outline, scheduling for classes and clinical experiences, and evaluation of students.

1. Core Subjects

	Clock Hours
a. Orientation to Health Careers	85
(1) Dental	
(2) Medical	
(3) Nursing	
(4) Other Health Care, related	
b. Personal, Vocational and Public Relations	50
(1) Medical Ethics, Legal Implications and Responsibilities	
(2) Mental Health Concepts	
(3) Communication Skills	
(4) Problem Solving	

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[7]Tennessee State Board for Vocational Education, Health Occupations Education In-Service Conference, (Nashville, 1968).

[8]Tennessee State Board for Vocational Education, MDT Occupational Instructors Handbook, (Nashville, 1969).

		Clock Hours
c.	Personal and Community Health	30
	(1) Factors Affecting Health Care	
	(2) Sanitation Control	
	(3) Housekeeping Techniques	
	(4) Safety Measures	
d.	First Aid and Medical Self-Help	30
e.	Basic Nutrition	20
f.	Basic Anatomy and Physiology	20
g.	Introductory Bacteriology	15
	(1) Microbes and Disease	
	(2) Medical Asepsis	
	(3) Surgical Asepsis	
h.	Related Medical Terminology	10
	(1) Prefixes	
	(2) Suffixes	
	(3) Abbreviations	
	(4) Symbols	
	(5) Common Terms Related to Medical Science	
i.	Basic Principles and Skills in Selected Health Careers	151
	(1) Nursing (100)	
	(2) Medical Records (10)	
	(3) Introductory X-Ray (6)	
	(4) Orinetation to Medical Laboratory (15)	
	(5) Other Related Areas	
j.	Growth and Development	25
k.	Conditions of Illnesses	50
	(1) Diet Deviations	
	(2) Measurements and Safety Precautions Related to Drug Administration	
l.	Rehabilitative Measures	20
	Total Class Hours	506

2. Organization of Instruction

HEALTH OCCUPATIONS I

(First Year--Two Hour Block of Time)

SUBJECT	FIRST SEMESTER	SECOND SEMESTER	TOTAL HOURS
Orientation to Health Careers	60	25	85
Personal, Vocational, and Public Relations	50	--	50
First Aid and Medical Self-Help	30	--	30
Basic Anatomy and Physiology	--	10	10
Basic Principles and Skills in Selected Health Careers a. Nursing b. Medical Laboratory c. Medical Records d. X-Ray	--	140	140
Related Medical Terminology	--	5	5
TOTAL CLASS HOURS	140	180	320

2. Organization of Instruction (continued)

HEALTH OCCUPATIONS II

(Second Year--Three Hour Block of Time)

SUBJECT	FIRST SEMESTER	SECOND SEMESTER	TOTAL HOURS
Basic Nutrition	20	--	20
Basic Anatomy and Physiology	10	--	10
Introductory Bacteriology	15	--	15
Growth and Development	25	--	25
Conditions of Illnesses	27	23	50
Basic Principles and Skills in Selected Health Careers	--	11	11
Rehabilitative Measures	--	20	20
Related Medical	5	--	5
TOTAL CLASS HOURS	102	54	156
Clinical Experience:			
Three days per week	153	--	153
Four days per week	--	216	216
TOTAL CLINICAL HOURS			369

3. Course Outline

Subject: Orientation to Careers in the Health Field

Length: 85 Clock Hours

Teaching Methods: Lecture and Guest Speakers
Group Discussion
Individual Study and Research
Observational Field Trips and Reports
Interviews

Instructional Aids: Audiovisual Media
Posters
Pamphlets
Instruction Sheets
Chalk board
Tape Recorder/Tapes
Bulletin Board
Diagrams

Reference Material:

Horizons Unlimited, A Medical Careers Handbook. Chicago: American Medical Association, 1969.

Health Careers Guidebook. Washington: U.S. Government Printing Office, 197_.

Lebowitz, Gordon. You and A Health Career. New York: Fairchild Publications, Inc., 1972.

Being A Nursing Aide. Chicago: Hospital Research and Educational Trust, 1969.

Course Objectives:

1. To assist students to acquire knowledge of the career opportunities available in the health field so that upon completion of the program they will be able to make a more realistic occupational choice.

2. To provide students with the opportunity to obtain information about various health occupations by combining classroom activities with observational field trips and guest speakers presentations.

3. To encourage students to pursue postsecondary education in a health career within the limits of their individual interests and capabilities.

3. Course Outline (continued)

INSTRUCTIONAL UNITS	CONTENT TO BE TAUGHT	RESOURCE MATERIALS AND MGT. PROCEDURES
A. Introduction	1. Overview of Course Outline 2. Classroom & Laboratory 3. Appropriate Behavior for Observational Field Trips 4. Student Activities--V.I.C.A. Club 5. Evaluation Methods	pass-out sheets of syllabus Guest Speaker: V.I.C.A. Advisor Behavioral (Performance) Objectives
B. Careers in Medical Field: 1. Qualifications 2. Educational Requirements 3. Duties 4. Employment Benefits	(a) Physicians (Speciality Areas) Physician's Assistant (b) Dentist, Speciality Areas, Dental Hygenist Dental Lab. Tech. Dental Assistant	Guest Speakers and Field Trips to offices
C. Careers Allied to Medicine: 1. Qualifications 2. Educational Requirements 3. Duties 4. Employment Benefits	(a) Careers in Nursing-- Registered Nurse Operating Room Tech. Licensed Practical Nurse Nursing Assistant Ward Clerk (Supportative to Nursing) Orderly Psychiatric Aide	Film: "Horizons Unlimited" Field Trips to Health Agencies "Pass-Out" Sheets Organizational Structure of Hospital Departments
D. Careers in Hospitals and Other Fields	(a) Administration (b) Admitting Clerk (c) Business Office Personnel (d) Personnel Director (e) Public Relations Director (f) Purchasing Agent	Guest Speakers Field Trips

3. Course Outline (continued)

INSTRUCTIONAL UNITS	CONTENT TO BE TAUGHT	RESOURCE MATERIALS AND MGT. PROCEDURES
	(g) Secretarial and Clerical Accounts Clerk Insurance Clerk Medical Secretary Medical Transcriber	Have students write for pamphlets on various careers. (Free)
	(h) Professional Services Anesthetist Inhalation Therapist Microbiologist	
Medical Technology	Cytotechnologist Histologic Technician Medical Technologist Medical Lab. Tech. Certified Lab. Asst.	Write reports on Field Trips, Observations
Radiologic Technology	Nuclear Medical Technologist & Technician Radiologic Technologist & Technician (X-Ray) Radiation Therapy Technologist	
Medical Records	Medical Records Librarian Medical Records Technician Medical Assistant	
Rehabilitation	Physical Therapist Physical Therapy Assistant Physical Therapy Aide Occupational Therapist Occupational Therapy Aide	Tour: Daniel Arthur Rehabilitation Center, (Oak Ridge or Other)
	Recreation Therapist Rehabilitation Counselor	Have students report to class on a career telling: facts about the job,

3. Course Outline (continued)

INSTRUCTIONAL UNITS	CONTENT TO BE TAUGHT	RESOURCE MATERIALS AND MGT. PROCEDURES
	Speech Pathologist and Audiologist	qualifications, educational requirements, etc.
	Mental Health Tech.	
	Art Therapist	
	Music Therapist	
Medical Social Work	Medical Social Worker	
	Social Work Associate	
	Social Work Tech.	
	Psychiatric Social Worker	
Pharmacy	Registered Pharmacist	
	Pharmacy Clerk	Visit Hospital Pharmacy and Druggist
Medical Illustration	Medical Illustrator	
	Medical Photographer	
Dietetics	Dietitian	Tour Dietary Department
	Dietetic Technician	
	Dietetic Assistant	
	Cafeteria Manager	
	Food Service Administrator	
	Food Service Supervisor	
	Food Production Manager	
Library	Health Science Librarian	
	Patient's Librarian	
Home Care	Home Health Aide	
	Homemaker	Check "Want-Ads" in local paper and tell benefits offered
	Nutritionist	
Plant Operation	Central Service Tech.	
	Hospital Engineer	
	Executive Housekeeper	
	Housekeeping Aide	
	Laundry Manager	
Public Health	Public Health Nurse	Visit Public Health Center
	Home Health Asst.	
	Sanitation Specialist	Visit Water Plant

3. Course Outline (continued)

Students may wish to set up booth at local fair.

Unit Test based upon behavioral objectives developed for each lesson by the instructor.

3. Course Outline (continuted)

SAMPLE LESSON PLAN

Name of Lesson: Career As a Nursing Assistant

Aim or Purpose:

1. To be able to write a description of a career as a nursing assistant which will include: pre-entrance educational requirements, length of training for the job, at least three personal characteristics (traits) desired, and the approximate pay scale at the completion of this lesson.

2. To be able to describe two advantages of being trained as a nursing assistant after class participation, hearing guest speaker, and from information obtained on the field trip.

References, Materials, and Resources:

Donovan, J., Belsjor, E. and Dillon, D. The Nurse Aide. New York: McGraw-Hill Book Company, 1968.

Guest Speaker (a nursing assistant)

Field Trip (observe a nursing assistant at work)

Interview employers of nursing assistants

Organizational Chart--Posters

Preparation (of the students):

Introduction: Put students at ease and get their attention, create interest, arouse their curosity and desire to learn about a nursing assistant's career. Find out what they already know. All these things can be done through statements, questions, and answers.

Presenting the Lesson:

STEPS (List points of information)	KEY POINTS (Things to Remember to Do or Say)
Relate the importance of nursing assistant's role on the Health Care Team.	Show nursing assistant position in the Organizational Chart of the Nursing Department. Point out other areas of employment (i.e. Home Health Aide).
Personality Traits	Good physical and mental health Enjoys people Cooperates with others Modulated voice Speaks correctly Appropriate dress and demeanor Reliable Understands and can do the job Follows rules and regulations Is safety conscious
Educational Requirements	Minimum eighth grade, preferably high school graduate.
Length of Training	250-300 Clock Hours of instruction includes clinical (on-the-job) experience.
Approximate Salary	Minimum wage and above.
Some advantages of being a nursing assistant.	Availability of employment. To be able to assist in making decisions. To be able to pursue further education in nursing or other health careers. To be able to render limited care to self and family members.
*Have guest speaker supplement information on career as nursing assistant.	*These may be expanded by instructor.

Presenting the Lesson (continued)

Application: (assignment)

Directed questions and answers to clarify and summarize key points of the lesson and to make sure the students understand a broad overview of the career as a nursing assistant.

Check-Up or Test (How to find out if the students have learned the lesson)

Following presentations and field trip, have each student:

1. Write a description of career as a nursing assistant including: pre-entrance educational requirements, length of training for the job, at least three personal characteristics (traits) desired, and the approximate pay scale.

2. Report to the class advantages of being a nursing assistant which they have learned through class presentation, interviews of nursing assistants (guest speakers) and field trips.

4. Student Evaluation

Definition:

A systematic process of determining the extent to which the objectives are being achieved by students.

Purpose:

To assess the progress of students to determine if they are meeting objectives of the course or program.

To motivate the students toward acquiring vocational proficiency.

To help the teacher improve teaching methods.

Methods:

Evaluation forms
Tests (Written, Oral, Performance)
Anecdotal Records
Observation
Check Lists
Progress Charts

When to Evaluate:

Students should be evaluated in accordance with local school policy, at the completion of each unit of study, and at any other time the instructor determines the need.

APPENDIXES

APPENDIX A

SUGGESTED REFERENCE BOOKS

APPENDIX A

SUGGESTED REFERENCE BOOKS
(Combined List for Teachers & Students)

INTRODUCTION TO HEALTH OCCUPATIONS

American Medical Association. Horizons Unlimited, A Medical Careers Handbook. Chicago: 535 North Dearborn Street, 1966. (Single Copy, Free)

Dodge, Bertha S. Hands That Help. Boston: Little, Brown, and Company, 1967.

Health Careers Guidebook. Washington: Superintendent of Documents, U.S. Government Printing Office.

Tennessee Health Careers. Guidance Counselor's Handbook. 3rd. ed. Nashville: 210 Reidhurst Avenue, 1971.

Today's Hospital . . . Career Center for America's Youth. American Hospital Association, Chicago: 840 North Lake Shore Drive. (Single Copy, Free)

HEALTH OCCUPATION CAREERS

American Hospital Association. Housekeeping Manual for Health Care Facilities. Chicago: 840 North Lake Shore Drive, 1966.

Anderson, Pauline C. The Dental Assistant. Albany: Delmar Publishers, 1970.

Arts, E. M. Medical Office Assistant. Albany: Delmar Publishers, 1968.

Bredow, Miriam and Marion G. Cooper. The Medical Assistant. 3rd. ed. New York: McGraw-Hill Book Company, 1970.

Caldwell, Esther and Barbara G. Hegner. Health Assistant. Albany: Delmar Publishers, 1969.

Coffin, Kenneth B. and R. Forrest Colwell. The Medical Secretary. New York: The MacMillan Company, 1959.

Donovan, Joan, Edith Belsjor and Daniel Dillion. The Nurse Aide. New York: McGraw-Hill Book Company, 1968.

Fitch, G. The Role and Responsibilities of the Practical Nurse. New York: The MacMillan Company, 1969.

Fredrick, Portia and Mary E. Kinn. The Office Assistant in Medical Practice. 3rd. ed. Philadelphia: W. B. Saunders Company, 1969.

Goldman. A Nurse's Guide fo the X-Ray Department. Baltimore: Williams and Wilkins Company, 1967.

Guinee, Kathleen K. The Professional Nurse. New York: The MacMillan Company, 1970.

Hadley, Anne. The Medical Secretary as a Ward Technician. Philadelphia: J. B. Lippincott Company, 1968.

Hospital Research of American Hospital Association. Being a Food Service Worker. Washington: Robert J. Brady Company, 1969.

Hospital Research and Educational Trust. Being a Nursing Aide. Washington: Robert J. Brady Company, 1969.

Hospital Research and Educational Trust. Being a Ward Clerk. Washington: Robert J. Brady Company, 1967.

Hospital Research and Educational Trust. Training the Ward Clerk. Chicago: 840 North Lake Shore Drive, 1967.

Lawton, M. Murray and Donald F. Foy. A Textbook for Medical Assistant. St. Louis: The C. V. Mosby Company, 1967.

Leitz, Ann N., Howard, et al. Associate Degree Nursing. 1st. ed. St. Louis: The C. V. Mosby Company, 1967.

Louise, Sister Mary. The Operating Room Technician. St. Louis: The C. V. Mosby Company, 1968.

Medical Laboratory Assistant, A Suggested Guide for a Training Program. Washington: Superintendent of Documents, U. S. Government Printing Office, 1966.

McClelland, Lucille H. Textbook for Psychiatric Technicians. St. Louis: The C. V. Mosby Company, 1967.

Morrison, G. Archanna. In the Dentist's Office. Philadelphia: J. B. Lippincott Company, 1959.

National Cylinder Gas, Division of Chemetron Corporation. Inhalation Therapy Handbook. Chicago: 840 North Michigan Avenue, 1958.

Parsons, Esther Jane. In the Doctor's Office. 2nd. ed. Philadelphia: J. B. Lippincott Company, 1956.

Richardson, Richard E., Roger E. Barton and John C. Barauer. The Dental Assistant. 4th. ed. New York: McGraw-Hill Book Company, 1970.

Robinson, Alice M. The Psychiatric Aide. Philadelphia: J. B. Lippincott Company, 1964.

Stolten, Jane H. The Health Aide. Boston: Little, Brown, and Company, 1972.

Stryker, Ruth P. The Hospital Ward Clerk. St. Louis: The C. V. Mosby Company, 1970.

Willard, Helen S. and Clare S. Spackman. Occupational Therapy. Philadelphia: J. B. Lippincott Company, 1971.

VOCATIONAL RELATIONS-COMMUNICATION-ETHICS-LEGAL ASPECTS

Bush, Christine H. Personal and Vocational Relationships for Practical Nurses. Philadelphia: W. B. Saunders Company, 1966.

Creighton, Helen. Law Every Nurse Should Know. Philadelphia: W. B. Saunders Company, 1968.

French, Ruth M. The Dynamics of Health Care. New York: McGraw-Hill Book Company, 1968.

Gordon, John V. Behavioral Components of Patient Care. New York: The MacMillan Company, 1970.

Lockerby, Florence K. Communications for Nurses. 3rd. ed. St. Louis: The C. V. Mosby Company, 1968.

McFadden. Medical Ethics. 6th. ed. Baltimore: F. A. Davis Company, 1967.

Milliken, Mary Elizabeth. Understanding Human Behavior, A Guide for Health Workers. Albany: Delmar Publishers, 1969.

Ross, Carmen F. Personal and Vocational Relationships in Practical Nursing. Philadelphia: J. B. Lippincott Company, 1969.

Sarner, Harvey. The Nurse and The Law. Philadelphia: W. B. Saunders Company, 1968.

Spaney, Emma and Louise A. Jennings. The Art of Studying. Philadelphia: J. B. Lippincott Company, 1958.

SUBJECT AREA REFERENCES

American College of Surgeons, Edited by Robert H. Kennedy, M.D. Emergency Care. Philadelphia: W. B. Saunders Company, 1966.

American Red Cross. First Aid Textbook. 4th. ed. Garden City: Doubleday and Company, Inc., 1957.

Asperheim, M. K. The Pharmacologic Basis of Patient Care. Philadelphia: W. B. Saunders Company, 1968.

Babcock, Dorothy E. Introduction to Growth, Development and Family Life. 3rd. ed. Philadelphia: F. A. Davis Company, 1971.

Bethea, D. C. Introductory Maternity Nursing. Philadelphia: J. B. Lippincott Company, 1968.

Broadribb, Violet. Foundations of Pediatric Nursing. Philadelphia: J. B. Lippincott Company, 1967.

Cherescavich, Gertrude. Textbook for Nursing Assistants. 2nd. ed. St. Louis: The C. V. Mosby Company, 1968.

Culver, Vivian M. Modern Bedside Nursing. 7th. ed. Philadelphia: W. B. Saunders Company, 1969.

Frenay, Sister Mary Agnes. Understanding Medical Terminology. St. Louis: The Catholic Association, 1964.

French, Ruth. Nurse's Guide to Diagnostic Procedures. New York: McGraw-Hill Book Company, 1967.

Hasler, D. and N. Hasler. Personal, Home, and Community Health. New York: The MacMillan Company, 1968.

Hirschberg, G. G., L. Lewis, and D. Thomas. Rehabilitation: A Manual for the Care of the Disabled and Elderly. Philadelphia: J. B. Lippincott Company, 1964.

Howe, P. S. Nutrition for Practical Nursing. 4th. ed. Philadelphia: W. B. Saunders Company, 1971.

Ingalls, A. Maternal and Child Health Nursing. St. Louis: The C. V. Mosby Company, 1967.

Jodias, Janet. Personal Care of Patients. Philadelphia: W. B. Saunders Company, 1970.

Johnston, Dorothy. Total Patient Care: Foundations and Practices. 2nd. ed. St. Louis: The C. V. Mosby Company, 1968.

Krause, M. V. Food, Nutrition, and Diet Therapy. 4th. ed. Philadelphia: W. B. Saunders Company, 1966.

Landon, J. F. and H. T. Sider. Communicable Diseases. 9th. ed. Philadelphia: F. A. Davis Company, 1969.

Leake, Mary J. A Manual of Simple Nursing Procedures. 4th. ed. Philadelphia: W. B. Saunders Company, 1966.

Mayes, Mary E. Abdallah's Nurse Aide Study Manual. 2nd. ed. Philadelphia: W. B. Saunders Company, 1970.

Memmler, Ruth and Ruth B. Rada. The Human Body in Health and Disease. 3rd. ed. Philadelphia: J. B. Lippincott Company, 1970.

Memmler, Ruth and Ruth B. Rada. Structure and Function of the Human Body. Philadelphia: J. B. Lippincott Company, 1970.

Miller and Keane. Encyclopedia and Dictionary of Medicine and Nursing. Philadelphia: W. B. Saunders Company, 1972.

McCutcheon, Maureen. Care of the Patient with Common Medical-Surgical Disorders. New York: McGraw-Hill Book Company, 1970.

Plein, J. B. and E. D. Plein. Fundamentals of Medications. Philadelphia: J. B. Lippincott Company, 1967. (Instructor's supplement with an answer book available upon request).

Schweer, Jean E. Creative Teaching in Clinical Nursing. St. Louis: The C. V. Mosby Company, 1972.

Smith, Dorothy and Claudia Gips. Care of the Adult Patient. Philadelphia: J. B. Lippincott Company, 1971.

Strand, H. R. An Illustrated Guide to Medical Terminology. Baltimore: Williams and Wilkins Company, 1968.

Taber. Cyclopedic Medical Dictionary. 11th. ed. Philadelphia: F. A. Davis Company, 1969.

Young, Helen, et al. Lippincott's Quick Reference Book for Nurses. Philadelphia: J. B. Lippincott Company, 1967.

Wheeler, M. F. and W. A. Volk. Basic Microbiology. 3rd. ed. Baltimore: F. A. Davis Company, 1968.

Wood, Lucille. Skills for Allied Health Services. Volume I, Volume II. Philadelphia: W. B. Saunders Company, 1972.

APPENDIX B

SUGGESTED EQUIPMENT, TEACHING AIDS AND SUPPLIES

SUGGESTED EQUIPMENT, TEACHING AIDS AND SUPPLIES

1. Classroom Equipment

QUANTITY	DESCRIPTION	APPROXIMATE COST
5	Tables (Students, four per table)	$ 500.00
	Work tables (demonstration)	150.00
	Side Chairs, with padded seat or school chair with desk arm	350.00
	Teacher's Desks	300.00
	Desk Chairs	150.00
	File cabinets, 4 drawer with lock	175.00

2. Equipment

1	Chart rack on portable stand with chart backs	200.00
1	Autoclave	500.00
1	Incubator	315.00
1	Instrument sterilizer	150.00
2	Beds, hospital with side rails	700.00
1	Bed, electric	600.00
3	Mattresses	255.00
3	Overbed tables	210.00
3	Bedside cabinets	390.00
7	Bedscreens, portable, or ceil track curtains	110.00
1	Wheelchair with leg rest	115.00
1	Stretcher with pad	256.00
1	Sphygmomanometer, floor model	100.00
1	Sphygmomanometer, table model	75.00
1	Sphygmomanometer, cuff model	90.00
1	Skeleton, plastic articulated	450.00
1	Torso with removable parts and teacher's guide	800.00
1	Chase doll, adult	300.00
1 set	Winslow Health and Hygiene Charts, chart head on Tripod Stand, instructor's guide	100.00
1	Teaching microscope AO double binocular oil emersion, built in light source	1,200.00
5	Student scopes AO binocular oil emersion, built in light source. @ $800.00 each	4,000.00
1	Large centrifuge	200.00
10	Hemocytometer, red cell and white cell count	250.00
2	Balances, triple beam	
1	Water Distilling Set, small	225.00
1	Coleman Junior Spectrophometer	500.00
1	Incubator	315.00

QUANTITY	DESCRIPTION	APPROXIMATE COST
1	Autoclave	$ 500.00
1	Dental Chair, portable	150.00
1	Dental skull, plastic	150.00
1	Cabinet mounted dental unit	2,000.00
1	Dental Care Display Unit #70335	115.00
1 set	Dental Charts	200.00
1	Amalgam set	50.00
5	Stop Watches @$25.00 each	$ 125.00
2	Large Water Baths for boiling water	12.00
1	Hot plate thermostatically controlled	30.00
1	Scales, floor model	75.00
1	Treatment cabinet	70.00
3	Bedside chairs, straight	75.00
1	Footstool, bedside	15.00
3	Trash cans	30.00
1	Garbage can, step-on style	20.00
1 pr.	Crutches	8.00
3	Bedpans	60.00
3	Urinals	30.00
3	Wash basins	36.00
3	Soap dishes	6.00
3	Emesis basins	9.00
3	Bedside pitchers with cups and trays	30.00
1	Linen Hamper	
1	Stethoscope, teaching small	10.00
3	Stethoscopes, standard	9.00
1	Graduated pitcher 500 cc	10.00
1	Graduated pitcher 1,000 cc	15.00
5 sets	Beakers	30.00
6	Erlenmeyer Flasks 250 ML	6.00
6	Graduated Cylinders 100 ML	30.00
6	Graduated Cylinders 50 ML	30.00
1 doz.	Serological Pipets 1 ML	10.00
1 doz.	Serological Pipets 5 ML	10.00
1 doz.	Serological Pipets 10 ML	12.00
18	Volumetric Pipets 1 ML	24.00
18	Volumetric Pipets 5 ML	25.00
18	Volumetric Pipets 10 ML	30.00
6	Brushes for cleaning laboratory equipment	5.00
2	Covered trays	30.00
6	Funnel	6.00
1	Transfer forceps with holder	15.00
1	Sponge forceps 10"	10.00

QUANTITY	DESCRIPTION	APPROXIMATE COST
1	Forceps Container (for 10")	6.00
1	Scissors, bandage 5"	8.00
1	Scissors, straight suture	8.00
2	Forceps, hemostat 5", 8"	20.00
1	Forceps, tissue, plain	12.00
1	Forceps splinter	10.00
1 set	Sponge Bowls	20.00
1	Tray, preparation with razor	6.00
1	Tray, stainless steel (6" x 12")	6.00
1	Tray, dressing (10 x 15)	8.00
1	Chase doll, newborn	20.00
1	Chase doll, 1 year	35.00
1	Model heart (life size)	50.00
1	Model ear	55.00
1	Model, eye on stand	70.00
1	Model, urinary system	45.00
1	First Aid, Resuscitation, Artificial Respiration Charts	15.50
2	RH Typing Boxes @ $20.00 each	40.00
5	Bunsen Burners @ $5.00 each	25.00
1	Baby Bath Tray	10.00
1	Percussion Hammer	
1	Flashlight	4.00
2 doz.	Thermometer containers, stainless	
1 set	Dressing containers, stainless	
1	Micro Capillary Centrifuge for packed cell volume	50.00
2 pkg.	Slides	5.75
1 pkg.	Cover slips (22 x 40)	6.00
1 pkg.	Capillary Glass Tubes	6.00
3 doz.	Pipets, Red Cell	20.00
3 doz.	Pipets, White Cell	20.00
1	Pipet Washer for large pipets	44.00
1	Pipet Washer for small pipets	36.00
1 pkg.	Micro Capillary glass tubes	6.00
6	Laundry Bags	12.00
3 doz.	Sheets	250.00
3 doz.	Spreads	90.00
2 doz.	Bath blankets	36.00
3 doz.	Draw sheets	45.00
4 doz.	Bath towels	50.00
6 doz.	Wash cloths	18.00
6	Mattress pads	12.00
6 doz.	Pillow cases	70.00

QUANTITY	DESCRIPTION	APPROXIMATE COST
3	Rubber draw sheets	3.50
6	Pillows	18.00
3	Hot water bottles	9.00
3	Ice caps	9.00
1	Bath Thermometer	2.00
2	Levine tubes, adult and child	2.75
1	Catheter, nasal oxygen	1.00
1	Oxygen mask with tubing	2.00
1	Medicine tray	2.50
1	Dispenser for paper cups	3.50
2	Nail care sets	4.00
4	Ace bandages, 2"	3.00
4	Ace bandages, 3"	8.00
4	Ace bandages, 4"	8.00
2 doz.	Triangular bandages	7.00
1	Abdominal binder, straight	1.50
1	Abdominal binder, scultetus	2.00
1	T-binder, single	1.00
1	T-binder, double	1.50
6	Hot water bottle covers	2.00
6	Ice cap covers	2.00
1 set (9)	Winslow Health and Hygiene Charts, Chart Head on Tripod Stand, Instructor's Guide	94.30
1	Model Teeth Development	90.00
1	Dental Hygiene Set	12.00
1	Tape measure	$ .50
2	Urinary drainage sets	3.00
1	Catheter Adapter	1.50
1	Asepto syringe, 1 ounce	3.00
1	Asepto syringe, 3 ounces	4.00
1	Syringe 30 cc	4.00
3 doz.	Thermometers, oral	25.00
1/2 doz.	Thermometers, rectal	4.50
1	Brush, bedpan	1.00
1	Brush, urinal	1.00
1	Brush, Bottle	.50
6	Brushes, hand	5.00
2 doz.	Gloves, rubber	6.00
1	Tourniquet, adult	2.25
1	Tourniquet, child	2.25
1 doz.	Medicine glasses	2.50
2 doz.	Medicine droppers	1.00
1 doz.	Urine specimen jars	1.80

QUANTITY	DESCRIPTION	APPROXIMATE COST
6	20 Gauge needles	2.00
1 gross	Medicine cards	1.50
1 box (500)	Tongue blades	2.00
1 box (1,000)	Cotton tipped applicators	2.00
1 box	Lens paper	2.50
1 package	Paper cups, dental	5.00
1 roll	Autoclave tape	1.20
1 roll	Autoclave paper	4.00
1 box	Autoclave indicator tubes	3.00
1 pint	White cell diluent	5.00
1 pint	Red cell diluent	5.00
1 pint	Wrights stain for blood	5.00
1 pint	Buffer for Wright stain	5.00
5	Critoseal (clay to seal end of tubes)	
1	Tray enema	5.00
1	Tray, Catheterization, plain catheter	6.00
1	Tray, Catheterization, foley catheter	7.00
1	Tray, irrigation, vaginal	8.00
1	Tray, irrigation, bladder	7.00
1 bottle	Acetest Reagent tablets (100)	2.10
3 boxes	Clinitest Reagent Tablets (24 per box in foil)	2.50
1 box	Alcohol pads	1.50
1 doz., pt.	Alcohol, rubbing compound	4.20
1 gallon	Green soap	5.00
1 can	Alconox	3.00
1 can	Detergent	2.50
2	Catheters, Foley 1-16 with 5 cc bag	6.00
	1-20 with 30 cc bag	6.00
2	Catheters, French and Robinson Size 6 and 12	3.00
1 gross	Safety pins, assorted	1.50
1 pkg.	2 x 2 Gauge sponges (200)	1.10
1 pkg.	4 x 4 Gauge sponges (200)	2.50
1 box	Telfa Sterile Pads (100)	1.35
1 roll	Non-sterile cotton, 16 ounce absorbent	.90
1 can	Cotton balls, absorbent	1.80
1 pkg.	1 x 2 Flesh Plastic strip (100)	1.25
1 pkg.	Medium Butterfly closure (100)	1.30
1 doz. rolls	1/2 x 10 yard adhesive tape	3.80
2 doz.	Gauze bandage rolls, 1"	3.00
2 doz.	Gauze bandage rolls, 2"	3.00
2 doz.	Gauze bandage rolls, 3"	3.00
2 tubes	Lubricating jelly, water soluble	3.00
1 box	Acetone	2.00

QUANTITY	DESCRIPTION	APPROXIMATE COST
1 box	Lysol	2.00
1 box	Baking soda	.30
1 pt.	Vinegar	.50
1 box	Trash can liners	
1 box	Cepacol	4.00
1 box	Tooth paste	4.00
1 box	Tooth brushes	2.00
1 pt.	Glycerine	1.00
1 pt.	Lemon Juice	1.50

3. Audiovisual Equipment and Materials

1	Projector, Overhead, with cooling system	$ 115.00
1	DuKane "Micromatic" Sound Filmstrip Projector (or filmstrip projector and Record Player)	265.00
1	Sound-On Slide Projector (3M)	835.00
1	Projector, 16mm Movie	700.00
1	Cassette Tape Recorder	125.00
*1	ROCOM--Health Employee (Roche) Learning Program (Hardware)	926.50
1	Screen, Wall Mounted (or with Tripod Stand)	100.00
	Transparencies:	
1 set	"Fundamentals of Nursing," Units 1-16	650.00
1 set	"Obstetrical"	115.00
1 set	"Medical Aid in Disaster Situations"	425.00
1 set	"Dental Hygiene"	50.00
1 set	"Training the Ward Clerk"	170.00
	Filmstrips: (33mm Trainex with 33 1/3 record, LP)	
1 set	Basic Needs, BN-1 (Set of 5)	225.00
	BN 101 "Blood Pressure"	
	BN 103 "Bed Bath"	
	BN 105 "Temperature, Pulse, Resp."	
	Basic Needs, BN-2	
	BN 107 "Feeding the Patient"	
	BN 110 "Medical Asepsis"	

QUANTITY	DESCRIPTION	APPROXIMATE COST
1 set	Basic Needs, BN-4 (Set of 5) BN 119 "Observation and Charting" Basic Needs, BN-5 BN 124 "Assisting with Physical Exam" BN 125 "The Hospital Story" Hospital Housekeeping, HK-1 HK 130 "Housekeeping Orientation" Hospital Food Service, FS-1 FS 158 "Food Service Orientation"	225.00
1 set (2)	Filmstrips: Bacteriological Techniques	12.50
1 set	Look, Listen and Learn Series--600 slides 72 taped lectures (National Committee for Careers in Medical Technology)	285.00
*	ROCOM Learning Units, rental per unit--$12.00. Purchase per unit: 8mm--$189.00, 16mm--$249.00	See Source Listing

APPENDIX C

TEACHING AIDS AND SUPPLY SOURCES

APPENDIX C

TEACHING AIDS AND SUPPLY SOURCES

ROBERT J. BRADY COMPANY (A subsidiary of Prentice-Hall, Inc.)
130 QUE STREET, N. E.
WASHINGTON, D. C. 20002

1968 CATALOGUE

I. Overhead Transparencies: "Fundamental Nursing Principles"
   (a) Units 1 to 10 (including Introductory Unit)--70 transparencies $280.00
   (b) Units 11 to 16--89 transparencies $352.00

   NOTE: Prices include carrying case and instructor's guides. Order number not listed.

II. Overhead Transparencies: "Dental Hygiene"
   (Proper Care of the Teeth)--Series of 24 Multi-colored transparencies in pictorial form and supporting text $ 72.00

   NOTE: Order Number not listed.

III. Overhead Transparencies: "First Aid"
   Series of 52 Multi-colored transparencies $120.00

   NOTE: Price includes storage case and a copy of 1967 edition of American Red Cross "First Aid" Manual. Order Number not listed.

IV. Overhead Transparencies: "Training the Ward Clerk"
   Complete kit comes in carrying case, includes 25 full color transparencies and instructor's key $169.00

   NOTE: Order Number not listed.

V. Overhead Transparencies: "Training the Food Service Worker"
   Complete kit includes 30 full color transparencies in carrying case and instructor's key $152.00

   NOTE: Order Number not listed.

VI. Overhead Transparencies: "Drugs and Your Body"
Complete set consists of 20 full color transparencies, storage case, and comprehensive teacher's guide $120.00

NOTE: Order Number not listed.

CAREER AIDS
229 North Central Avenue
Glendale, California 91203

Multimedia Learning Programs based upon Behavioral Objectives. Utilize filmstrips with cassette tapes or records, training guides, and testing materials.

Write for literature on programs available and for free previews.

CENTRAL SCIENTIFIC COMPANY
2128 SEVENTH AVENUE SOUTH
BIRMINGHAM, ALABAMA 35233

1969 CATALOGUE

I. Hospital Doll, Adult Sima, male and female
Equipped with natural orifices, including reservoirs and passages. Simulated muscle sites for injection. $240.00

Order Number 64150-593

II. Baby Chase Doll
Designed to teach the routine care of the infant. Made of durable and waterproof material $ 15.00

NOTE: May have to be ordered through Nashville Surgical Supply Company, 3332 Powell Avenue, Nashville, Tenn.

THE GEORGE F. CRAM COMPANY, INC.
SCHOOL AND LIBRARY DIVISION
730 E. WASHINGTON STREET
INDIANAPOLIS, INDIANA 46206

Representative: John C. Church
3820 Fairfax Drive, N. W.
Chattanooga, Tennessee 37415

1968 CATALOGUE

I. Cram See-Thru Thin Man
More than 200 anatomical parts named, indexed, and keyed. Full-length figure mounted. . .casters on base. Mylar polyester film used for overlays. Height 65", Width 22", Thickness 5". $199.50

a. Desk Model Thin Man, 35" high, cut off below fingertips and above knees $137.50

II. Cram Health Charts
32 Large Charts (32" x 46")
Heavy papercloth taped edges in chart head on tripod stand.
Set No. 32 $ 57.50

DENOYER-GEPPERT COMPANY
5235 RAVENSWOOD AVENUE
CHICAGO, ILLINOIS 60640

Representative: Edward Wayne Tarpley
511 Hazelwood Drive
Smyrna, Tennessee 37167
Telephone: 615-459-6661

1970 CATALOGUE

I.	20 Human Physiology Transparencies in Complete Lesson Book Order Number 444031	$ 49.00 Set
II.	Flipatran Viewing Stage (For above transparencies) Order Number 444031-99	$ 15.00
III.	Winslow Health and Hygiene Charts (19 Charts in full color--84 page teacher manual--no cost--Chart Head on Tripod Stand) Order Number 417501-41	$ 94.30 Set
IV.	Family Life and Sex Education Charts Eleven full color 36" x 24" in solid Chart Head on Tripod Stand Order Number 41345-41	$ 58.25
V.	Curriculum Guide in sex education Order Number 815202	$ 2.50
VI.	Articulated Human Skeleton Completely mounted, with suspension ring for hanging Supplied with 2 key cards. (Natural Bone) Order Number 72000	$349.00

VII. Model Ear
With removable ear drum, semi-circular canals, and cochlea. 24 parts. Includes instructional recording. $ 51.75

Order Number 70133--Size 15 x 6 x 10"

VIII. Model Eyeball
Five parts: two halves, Lucite lens, vitreous body and iris which are all removable. Twenty-two parts, coded Size 6 x 6 x 6". $ 67.75

Order Number 70102

IX. Human Torso and Head Model $731.50
31 Dissectible parts including interchangeable male and female pelvic inserts and reproductive organs. Illustrated instructors guide, free.

Order Number 700000

X. Filmstrips: "Bacteriological Techniques" $ 12.50

Order Number 67067

XI. Dental Care Display Case
With loops for hanging. (SOMSO). Fourteen instructive models. Represented are healthy and diseased dentures, and individual teeth including infection or dental pulp, infected tooth, tooth prepared for filling. $115.00

Order Number 70335

XII. Teeth Development
Traces development of human jaws, teeth of newborn, 5 year old child, 9 year old child, and adult. Includes teacher's key. $ 88.00

Order Number 70334

XIII. Human Development Model Set
Eight unbreakable plastic stages of human birth progression. $217.25

Order Number 70304

XIV. Chase Doll
Female Adult Model. $270.00

Order Number 70901

XV. Chase Doll

Order Number 70908--Newborn $ 15.00
Order Number 70910--1 Year Size $ 24.50

XVI. First-Aid, Resuscitation, Artificial Respiration Chart $ 15.50
Nine views.

Order Number 41812-14

MEDI-VISUALS, INC.
342 MADISON AVENUE
NEW YORK, NEW YORK 10017

I. Overhead Transparencies: "Obstetrics" $114.00
Set Includes 24 transparencies.

A. J. NYSTROM & COMPANY
3333 ELSTON AVENUE
CHICAGO, ILLINOIS 60618

Representative: Dave Clark
Hickory Hill Lane
P. O. Box 2375
Donelson, Tennessee 37214
Telephone: 615-883-5345

1970 CATALOGUE

I. Medical Helpers — $ 4.95
Set of 12 pictures--some representative titles: Giving First Aid, Giving an Inoculation, etc. In full color created especially for primary grades. #CH3.
Size 9 3/4" x 12 3/4".

II. Human Growth Transparency Set — $ 58.50
Full color transparencies, complete set of 13.

Order 13--THG
Individual Transparencies $5.00 each
THG 1--The Endocrine System
THG 2--Female Reproductive Organs
THG 3--Female Pelvis
THG 4--Male Reproductive Organs
THG 5--Menstruation, Fertilization
THG 6--Ovum and Sperm
THG 7--Early Cell Division
THG 8--Fetus Development
THG 9--The Placenta
THG 10--Full Term Fetus
THG 11--Childbirth
THG 12--Fraternal Twins
THG 13--Identical Twins

III. Froshe Anatomical Charts — $149.50
Set of 11 mounted on a heavy duty spring roller.

Order Number 11-FA/30

IV. Graphic Health Charts — $ 75.00
Size 33" x 44"--33 charts; mounted on a chart head with tripod. Teacher's guide. (288 pages).

Order Number GH 33/36

V. Articulated Skeleton — $300.00
Natural Bone--Metal ring attached for storage in cabinet or on stand. Good quality. Key card that identifies parts is furnished.

Order Number AS-104

VI. Skeleton Stand — $ 37.50
Disc base with casters (for above skeleton)

Order Number AS-1

VII. Torso and Head — $310.00
Beginning model. 34" high. A 228 page teacher's guide, "Functional Health Teaching," is furnished.

Order Number AM-98

VIII. Human Torso with Six Parts — $670.00
28 separate parts including sexless pelvic insert, Two-part male pelvic insert, and four-part female pelvic insert.

Order Number AM-FM 101

IX. Urinary Apparatus Model — $ 85.00
Life size model of kidneys, adrenal glands, abdominal aorta, uretus, and bladder. Size 8 x 12; key furnished.

Order Number AM-125 a

X. Model Ear — $ 47.00
The external auditory canal is dissected to the function with ear drum; ear drum, ossicles, cochlea, and semi-circular canals are removable. Size 15 x 10 x 8. Key is furnished.

Order Number AM-113

XI. Model Eye — $ 62.50

Dissectible model of right eye and attached muscles. Lucite lens and iris are removable. Furnished with plastic stand and key. Size 6 x 6 x 6".

Order Number AM-110

XII. Human Development Models — $ 97.50

Set of 5. Illustrate stages of human development from fertilization through 5 months. Furnished with teacher's guide and carrying case.

Order Number AM-129

APPENDIX D

AUDIOVISUALS AND SUPPLY SOURCES

AUDIOVISUAL SOURCES

(Write for free catalogue or brochure)

I. American Heart Association
44 East Twenty-Third Street
New York, New York (or local chapter)

II. American Hospital Association
840 North Lake Shore Drive
Chicago, Illinois 60611

III. American Medical Association
535 North Dearborn Street
Chicago, Illinois 60610

IV. Central Office Film Library
Veterans Administration
Vermont Avenue and H Street, N.W.
Washington, D. C. 20025

V. Department of the Army
Director, Central Audiovisual Support Center
Headquarters, Third United States Army
Fort McPherson, Georgia 30330

VI. Director, Medical Film Library
United States Naval Medical School
National Naval Medical Center
Bethesda, Maryland 20014

VII. Encyclopedia Britannica
425 North Michigan Avenue
Chicago, Illinois 60611

VIII. Loma Linda University Motion Picture Library
Audiovisual Center
Loma Linda, California
Marketing Coordinator:
J. B. Lippincott Company
P. O. Box 7758
Philadelphia, Pennsylvania 19101

IX. Medi-Visuals, Incorporated
342 Madison Avenue
New York, New York 10017

X. Modern Talking Pictures Services, Inc.
2020 Prudential Plaza
Chicago, Illinois 60601

XI. Pfizer Laboratories
267 West Twenty-Fifth Street
New York, New York 10001

XII. Public Health Service
Audiovisual Facility
Chamblee, Georgia 30005
Attention: Film Distribution

XIII. Smith, Kline and French Services Department
Smith, Kline and French Laboratories
1500 Spring Garden Street
Philadelphia, Pennsylvania 19101

XIV. Tennessee State Department of Education
Film Library
1319 Church Street
Nashville, Tennessee 37203

XV. Tennessee Department of Mental Health
300 Cordell Hull Building
Nashville, Tennessee 37219

XVI. Tennessee Department of Public Health
Cordell Hull Building
Nashville, Tennessee 37219

XVII. Trainex Corporation
Box 116
Garden Grove, California

XVIII. United States Public Health Service
Communicable Disease Center
1600 Clifton Road, N. E.
Atlanta, Georgia 30322
Attention: Public Health Service, Audiovisual Facility

XIX. ROCOM, Division of Hoffman-LaRoche, Inc.
Nutley, New Jersey 07110
Attention: Sales Service Department

XX. Soney Corporation of America
Video Products Department xxx-xxx
47-47 Van Dam Street
Long Island City, New York 11101

XXI. Visual Products Division
3M Company, 3M Center
Department WAM-43
St. Paul, Minnesota 55101

LISTINGS OF AUDIOVISUALS AND THEIR SOURCE

American Hospital Association

Film: "The Patient As A Person"

American Medical Association

Film: "Hospital Sepsis"

Central Office Film Library--Veterans Administration

Films: "Mechanisms of Breathing"
"Preface To Life"
"Work of the Kidneys"

Department of the Army

Films: "Anatomy and Physiology--The Respiratory System"
"Basic Care of Patients--Part I--Cleaning the Patient Unit and Making An Unoccupied Bed"
"Basic Care of Patients--Part III-Making An Occupied Bed"
"Basic Care of Patients--The Bed Bath"
"Basic Care of Patients--Part IV--Physical Comforts"
"Basic Care of Patients--Part V--Feeding the Patient"
"Basic Care of Patients--Part VI--The Enema"
"Basic Care of Patients--Part VII--Sterile Technique"
"Basic Care of Patients--Part VIII--Preoperative Care"
"Basic Care of Patients--Part IX--Postoperative Care"
"Career Reports--The Professional Nurse"
"Catheterization Technique"
"First Aid"
"Heat Disorders: Heat Exhaustion, Heat Stroke and Heat Cramps"
"Hospital Food Service Personnel Training--Part I--Introduction"
"Hospital Ward Team" (Emphasizes Medical Technician)
"Introduction to Occupational Therapy"
"Introduction to Prolonged Artificial Ventilation"
"Mouth-To-Mouth Resuscitation"
"Occupational Health Program"
"Oxygen Therapy--Theory and Practice"
"Personal Hygiene"
"Safety in Hospitals"
"Surgical Positioning"
"Therapeutic Exercises--Orthopedics"
"Today's Decisions--Tomorrow's Rewards" (Careers)

"To Hear Again"
"Use of Inhalation Therapy Equipment--Part I"
"Use of Turning Frames" (Includes Stryker)

Filmstrips: "Anatomy and Physiology" Series
The Digestive System
The Endocrine System
The Lymphatic System
The Muscular System
The Respiratory System
The Skeletal System
The Urinary System
"The Surgical Dressing Cart"

Director, Medical Film Library, U. S. Naval Medical School

Films: "Catheterizing the Male Patient"
"Intravenous Administration of Fluids"
"Isolation Techniques"
"Making A Recovery Bed"
"Nursing Care--The Cardiac Patient"
"Nursing Care--The Diabetic Patient"
"Nursing Care--The Neurosurgical Patient"
"Nursing Care--Evening and Morning Care"
"Preoperative Care"
"Postoperative Care"
"Vital Signs--Part I"--(Cardinal Symptoms)
"Vital Signs--Part II"--(Methods T.P.R.)
"Vital Signs--Part III"--(Taking B/P)

Encyclopedia Britannica

Films: "Bedmaking"
"Mouth Care"
"Incontinent Patient"
"Positioning the Patient"
"Lifting and Moving the Patient"

Loma-Linda University

Film: "Vital Signs and Their Interrelation"

Pfizer Laboratories

Film: "Bronchitis and Bronchiectosis"

Public Health Service--Chamblee, Georgia

Films: "Almost A Miracle" (Visiting Nurse Service)
"Enemy Bacteria, The"
"Therapeutic Uses of Heat and Cold; Part 1: Administering Hot Applications"
"Therapeutic Uses of Heat and Cold; Part 2: Administering Cold Applications"

Medi-Visuals

Modern Talking Pictures Services, Inc.

"The O.D.'s--Vision Care Specialists"--15 Minute, 16mm Color Film focuses on Optometry as a career. (For Loan)

"Horizons Unlimited"--28 Minute, 16mm Color Film presents a variety of careers in the hospital. (Available on Loan)

"What About Tomorrow?"--18 Minute, 16mm Color Film on dental careers. (Available on Loan)

Smith, Kline, and French Laboratories

Films: "Mrs. Reynolds Needs A Nurse"
"Psychiatric Nursing: The Nurse-Patient Relationship"
"Remotivation: A New Technique For the Psychiatric Aide"
"Toymakers" (on Mental Retardation)

Tennessee Department of Public Health

Films: Accident Prevention and First Aid:
"Accidents Don't Just Happen"
"Breath of Life"
"Rescue Breathing"
"That They May Live"

Careers:
"Career In the Profession of Dentistry"
"Challenge To Serve"
"Health Careers"
"Search For Meaning"
"She Also Serves"
"Student Nurse"
"View From the Mountain"
"Your Friend in Blue"

Chronically Ill and Aging:
"Care At Home"
"Homes That Care"
"There Is A Way"

Communicable Diseases:
"Body Defense Against Diseases"
"How To Catch A Cold"
"Immunizations"
"Unconditional Surrender"

Dental Health:
"Dental Assistant--A Career of Service"
"Dental Assistants: Their Effective Utilization"
"Dental Health: How and Why"

Heart and Strokes:
"Circulation"
"Heart Disease--Its Major Causes"
"Heart, The--How It Works"
"Prevention of Disability From Stroke"
"Road Back, The" (Stroke Patient)
"Strokes"

Industrial Health:
"How To Avoid Muscle Strains"

Maternal and Child Health:
"Baby Meets His Parents"
"Care of the Newborn Baby"
"Fears of Children"
"From Creeping to Walking"
"Know Your Baby"

Medical Self-Help:
"Medical Self-Help Training Films" and Kit, available from local Health Department
"Artificial Respiration"
"Fractures and Splinting"
"Burns"
"Shock"
"Nursing Care of the Sick and Injured"

Mental Health:
"High Wall"
"Martha Belongs"

"Mr. Finley's Feelings"
"Nation's Mental Health, The"
"Broken Appointment"

Nursing:
"Almost A Miracle"
"Care of the Cardiac Patient"
"Diary of Connie McGregor"
"PKU--Preventable Mental Retardation"

Nutrition:
"Digestion of Foods"
"Understanding Vitamins"
"You and The Living Machine
"Making A Good Food Better"

Physical Therapy and Rehabilitation:
"Second Chance"
"Proud Years"

Sanitation:
"A Public Well Served"
"Serving Food"

Personal Hygiene:
"Body Care and Grooming"

Speech and Hearing:
"Report on Donald"
"Your Children's Ears"

Tuberculosis:
"The Inside Story"

Venereal Disease:
"Know For Sure"
"A Quarter Million Teenagers"

Filmstrips: (Silent)--Use on 35mm Projector
"Conquering Diptheria"
"Digestive System"
"Florence Nightingale"
"Food For Life"
"Food For Health"
"Madame Curie and the Story of Radium"
"Walter Reed" (Yellow Fever)
"You and Safety" Series

Filmstrips: (Sound)--Use on 35mm Projector and Record Player, 33 1/3 Speed.
"In Your Hands" (Community Hospital)
"Just One In A Crowd" (Diabetes)
"Nursing in Occupational Health"
"Public Health Nursing Series"
--Collection of Blood Specimens
--Collection of Sputum Specimens

Slides: "Circulatory System"
"Nursing Education: Circulatory System"
"Rheumatic Fever"
"Dental Health" (Set of 3)
--Early Dental Care
--Food and Dental Health
--Tooth Brushing

Tennessee Department of Education

Films: "Child Care and Development"
"Children's Emotions"
"Developmental Characteristics of Pre-Adolescents"
"Feeling of Hostility"
"Feeling of Rejection"
"Feeling of Depression"
"Frustrating Fours and Fascinating Fives"
"Getting A Job"
"He Acts His Age"
"Health Careers"
"Know Your Baby"
"Learning To Study"
"Life With Baby"
"Meaning of Adolescence"
"Overdependency"
"Personality and Emotions"
"Planning Your Career"

Tennessee State Department of Mental Health

Films: "Emotional Health"
"Facing Reality"
"Key, The"
"Man To Man"
"Mental Health"
"Patient Is A Person, A"
"People Who Care"

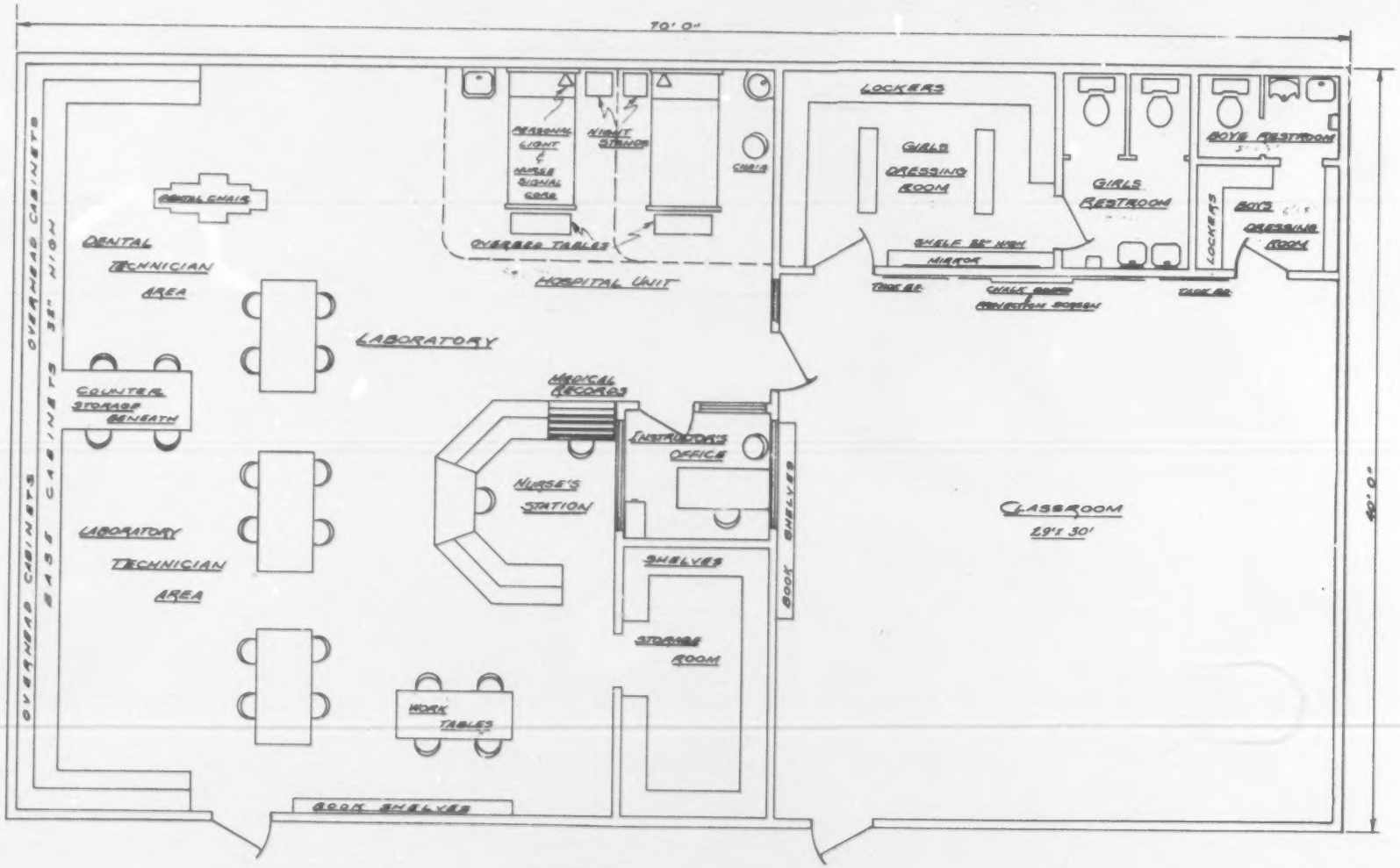
"Personality and Emotions"
"RX Attitude"
"To Your Health"
"Toward Emotional Maturity"
"Working and Playing To Health"

United States Public Health Service

Films: "Handwashing In Patient Care"
"Nurse Combats Disease, The"
"Postoperative Management of a Colostomy"

APPENDIX E

SCHEMATIC DESIGN



HEALTH OCCUPATIONS ORIENTATION

DESIGNED FOR 20 STUDENTS

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Guidelines & Course Outlines, Practical Nursing. Nashville: Tennessee State Board for Vocational Education, 1973.

Health Occupations Education In-Service Conference. Nashville: Tennessee State Board for Vocational Education, 1968.

MDT Occupational Instructor's Handbook. Nashville: Tennessee State Board for Vocational Education, 1969.

Office of Education, U. S. Department of Health, Education, and Welfare. (Voc. Div. Bulletin No. 288). Organization and Effective Use of Advisory Committees. Washington: U. S. Government Printing Office, 1961.

Office of Education, U. S. Department of Health, Education, and Welfare, Vocational Education and Occupations. Washington: U. S. Government Printing Office, 1969.

Rules and Regulations and Minimum Standards. Nashville: Tennessee State Board of Education, 1971.

Shop Instructor's Handbook. Nashville: Tennessee State Board for Vocational Education, 1964.

Tennessee State Plan for the Administration of Vocational Education. Nashville: Tennessee State Board for Vocational Education, 1973.